Community Exposures to the 1965 and 1970 Accidental Tritium Releases from the Lawrence Livermore National Laboratory

ATSDR
AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

February 2003...

On Tuesday, February 18, 2003, ATSDR will host a Public Meeting at the Arroyo Seco School, 5280 Irene Way, Livermore, CA. 7:30 PM - 9:45 PM to present ATSDR's public health findings on the historic accidental tritium releases from the LLNL.

What is ATSDR?

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. It was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as the Superfund legislation). ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances.

How did ATSDR become involved with the LLNL site?

ATSDR is required to conduct a public health assessment (PHA) of all facilities proposed for listing on the NPL. The LLNL site was placed on the Superfund National Priorities List in 1987. As part of ATSDR's public health activities for the LLNL site, we have initiated a PHA on the Community Exposures to the 1965 and 1970 Accidental Tritium Releases.

What is a public health assessment?

A public health assessment is an evaluation of whether community exposures to hazardous substances from a site might cause any harm to people. This public health assessment specifically evaluates potential short-term tritium doses from the historic, accidental tritium releases.

What is tritium?

Tritium is a radioactive isotope of hydrogen and might be present in the environment as a chemical or compound of hydrogen, including hydrogen gas, tritiated water, or as various organic compounds such as organically bound tritium. The radiation doses from tritium exposure depend on the specific chemical form of the tritium that is ingested or inhaled, the concentrations, and the type and duration of exposures.

What were the findings of the PHA?

The short-term exposure(s) to tritium from either, or both, of the accidental HT releases in 1965 and 1970 are not a public health hazard. Although some public exposure to tritium probably did occur as a result of the accidental releases, estimated maximum exposures were below levels that might cause adverse health effects.

As the potential, historic exposures were below levels of public health concern, no specific recommendations are warranted. This conclusion is specific to the accidental releases of tritium from LLNL that occurred in 1965 and 1970 and the short-term exposures resulting from those releases. A separate health consultation evaluated chronic or long-term LLNL tritium releases and found that long-term tritium doses from LLNL releases also are below levels of public health concern.

Whom should I call for more information?

Mark Evans, Senior Geologist at: 1-888-422-8737
or
e-mail: mevans@cdc.gov

For additional information, visit ATSDR's Internet address at http://www.atsdr.cdc.gov

03-0099 LLNL Community